1. Product and Company Identification

- **Product Code:** GMA58
- **Product Name:** Klean-Strip Muriatic Acid
- **Reference #:** 905

**Manufacturer Information**
- **Company Name:** W. M. Barr
  2105 Channel Avenue
  Memphis, TN  38113
- **Phone Number:** (901)775-0100
- **Emergency Contact:** 3E  24 Hour Emergency Contact   (800)451-8346
- **Information:** W.M. Barr Customer Service   (800)398-3892
- **Web site address:** www.wmbarr.com
- **Preparer Name:** W.M. Barr EHS Department   (901)775-0100

2. Composition/Information on Ingredients

- **Hazardous Components (Chemical Name):** Hydrochloric acid

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Percentage</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hydrochloric acid</td>
<td>7647-01-0</td>
<td>9.0 -36.0 % No data.</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

3. Hazards Identification

**Emergency Overview**

- No data available.

**OSHA Regulatory Status:**

- This material is classified as hazardous under OSHA regulations.

**Health Hazards (Acute and Chronic)**

- **Inhalation Acute Exposure Effects:**
  May cause irritation of respiratory tract and cough.

- **Skin Contact Acute Exposure Effects:**
  Causes severe burns and irritation.

- **Eye Contact Acute Exposure Effects:**
  Causes severe burns.

- **Ingestion Acute Exposure Effects:**
  Poison. May be fatal if swallowed. May cause severe irritation, perforation of the intestinal tract, and burns in mouth, pharynx, and gastrointestinal tract.

- **Chronic Exposure Effects:**
  None known.

**Signs and Symptoms Of Exposure**

- No data available.
Medical Conditions Generally Aggravated By Exposure
None known.

OSHA Hazard Classes:
HEALTH HAZARDS : N/E
PHYSICAL HAZARDS : N/E
TARGET ORGANS & EFFECTS: N/E

4. First Aid Measures

Emergency and First Aid Procedures
Inhalation:
If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

Skin Contact:
Wash with soap and large quantities of water and seek medical attention if irritation from contact persists.

Eye Contact:
Flush with large quantities of water for at least 15 minutes and seek immediate medical attention.

Ingestion:
Do not induce vomiting. Drink 1 or 2 glasses of water or milk to dilute. Never give anything by mouth to an unconscious person. Call your poison control center, hospital emergency room or physician immediately for instructions.

5. Fire Fighting Measures

Flash Pt: No data.
Explosive Limits: LEL: No data. UEL: No data.
Autoignition Pt: No data.

Effective Fire Fighting Procedures
Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

Unusual Fire and Explosion Hazards
No data available.

Extinguishing Media
Use carbon dioxide, dry powder or foam.

Unsuitable Extinguishing Media
No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled
Clean Up:
Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area.

Small Spills:
Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.
Large Spills:
Dike far ahead of the spill for later disposal.

7. Handling and Storage

Precautions To Be Taken in Handling
Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Precautions To Be Taken in Storing
Keep container tightly closed when not in use. Store in a cool, dry place away from direct sunlight and heat to avoid can deterioration. Avoid storage at extreme high or low temperatures. Protect from freezing.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)
For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator. A dust mask does not provide protection against vapors.

Eye Protection
Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

Protective Gloves
Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with products.

Other Protective Clothing
Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Ventilation
Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[X] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>123.00 F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>No data. Method:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: No data.</td>
<td>UEL: No data.</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Density:</td>
<td>9.660 LB/GA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Presure:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>99.999 % by weight.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Corrosion Rate: No data.
pH: No data.
Appearance and Odor: No data available.

10. Stability and Reactivity

Stability: Stable [X]
Conditions To Avoid - Instability: No data available.
Incompatibility - Materials To Avoid: Incompatible with strong oxidizing agents, strong caustics, alkali and alkali metal, cyanides, and common and active metals (which produce flammable hydrogen gas).
Hazardous Decomposition Or Byproducts: Thermal decomposition may produce hydrogen chloride vapors.
Hazardous Polymerization: Will not occur [X]
Conditions To Avoid - Hazardous Polymerization: No data available.

11. Toxicological Information

No data available.

12. Ecological Information

No data available.

13. Disposal Considerations

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

14. Transport Information

LAND TRANSPORT (US DOT)
DOT Proper Shipping Name: No data available.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)  CAS #  Sec.302 (EHS)  Sec.304 RQ  Sec.313 (TRI)  Sec.110
1. Hydrochloric acid  7647-01-0  Yes 500 LB  Yes 5000 LB  Yes  No

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)  CAS #  EPA CAA  EPA CWA NPDES  EPA TSCA  CA PROP 65
1. Hydrochloric acid  7647-01-0  HAP  No  No  No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

Sec.302: EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304: EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Klean-Strip Muriatic Acid

MATERIAL SAFETY DATA SHEET

Sec.313:
EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.

Sec.110:
EPA SARA 110 Superfund Site Priority Contaminant List

TSCA (Toxic Substances Control Act) Lists:
- 5A(2): Chemical Subject to Significant New Rules (SNURS)
- 6A: Commercial Chemical Control Rules
- 8A: Toxic Substances Subject To Information Rules on Production
- 8A CAIR: Comprehensive Assessment Information Rules - (CAIR)
- 8A PAIR: Preliminary Assessment Information Rules - (PAIR)
- 8C: Records of Allegations of Significant Adverse Reactions
- 8D: Health and Safety Data Reporting Rules
- 8D TERM: Health and Safety Data Reporting Rule Terminations

Other Important Lists:
- CWA NPDES: EPA Clean Water Act NPDES Permit Chemical
- CAA HAP: EPA Clean Air Act Hazardous Air Pollutant
- CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
- CA PROP 65: California Proposition 65

EPA Hazard Categories:
This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:
- [ ] Yes [X] No Acute (immediate) Health Hazard
- [ ] Yes [X] No Chronic (delayed) Health Hazard
- [ ] Yes [X] No Fire Hazard
- [ ] Yes [X] No Reactive Hazard
- [ ] Yes [X] No Sudden Release of Pressure Hazard

16. Other Information

Company Policy or Disclaimer
The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.