1. Product and Company Identification

Product Code: 401.5
Product Name: Klean Strip Phosphoric Prep & Etch

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 Dept (901)775-0100

Intended Use: Metal prep & etch for removing rust and paint and stain adhesion.

Synonyms
GKPA30220, QKPA30221

2. Hazards Identification

Emergency Overview

Danger. May cause burns. Eye and skin irritant. Harmful if swallowed.

OSHA Regulatory Status:
This material is classified as hazardous under OSHA regulations.

Health Hazards (Acute and Chronic)

INHALATION EFFECTS:
Can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth, and throat. Lung irritation and pulmonary edema can also occur.

SKIN CONTACT EFFECTS:
This product is a skin irritant. May cause burns and irritation.

EYE CONTACT EFFECTS:
This material is an eye irritant. May cause burns or blindness.

INGESTION EFFECTS:
Harmful or fatal if swallowed. Ingestion causes irritation and can cause corrosive burns to the mouth, throat, and stomach.

CHRONIC EFFECTS:
Long-term exposure may cause upper respiratory disease and irritation of the skin.

TARGET ORGANS: skin, eyes, respiratory system

ROUTES OF ENTRY: skin, inhalation, ingestion, eyes
3. Composition/Information on Ingredients

Hazardous Components (Chemical Name) | CAS # | Concentration
--- | --- | ---
Phosphoric acid (Orthophosphoric acid) | 7664-38-2 | 35.0 - 45.0 %

4. First Aid Measures

Emergency and First Aid Procedures

Skin: Immediately wash skin thoroughly with large amounts of water, while removing clothing. Seek medical attention if irritation develops or persists.

Eyes: Immediately begin to flush eyes with water, remove any contact lens if present. Continue to flush the eyes for at least 15 minutes. Seek medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Observe for possible delayed reaction.

Ingestion: If swallowed, do NOT induce vomiting. Drink large amounts of water (or milk if available) to dilute the acid. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flammability Classification: Non-Flammable
Flash Pt: NE
Explosive Limits: LEL: No data. UEL: No data.

Special 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. Stay upwind of fire.

Unusual Fire and Explosion Hazards

No data available.

Hazardous Combustion Products

In a fire phosphoric acid may release phosphorus oxides and/or phosphine from thermal decomposition and hydrogen from reaction with metals.

Suitable Extinguishing Media

Non-combustible liquid - use extinguishing media for underlying cause of fire.

Unsuitable Extinguishing Media

None known.
6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Isolate the immediate area. Prevent unauthorized entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. No smoking in spill area.

Small Spill:
Neutralize acid spill with alkali such as soda ash, sodium bicarbonate, limestone or lime. Absorb material with an inert material such as sand, vermiculite, diatomaceous earth or other absorbent material and place in chemical waste container to be disposed at an appropriate waste disposal facility. Adequate ventilation is required for soda ash due to the release of carbon dioxide gas.

Large Spill:
Contain spill with dikes and transfer material to appropriate containers for reclamation or disposal. Clean up remaining material as you would for a small spill.

7. Handling and Storage

Precautions To Be Taken in Handling

Avoid contact with skin and eyes. Avoid inhalation of vapor and ingestion of liquid.

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 applicable local, state, and federal regulations. Do not reuse this container.

A source of clean water for emergency flushing of the eyes or skin should be kept in or near the work area.

Precautions To Be Taken in Storing

Store in a closed container in a cool, well ventilated area. Store away from heat sources and out of direct sunlight. Protect from freezing. Avoid extreme high or low temperatures.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phosphoric acid {Orthophosphoric acid}</td>
<td>7664-38-2</td>
<td>PEL: 1 mg/m3</td>
<td>TLV: 1 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 3 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type)

For use in areas with inadequate ventilation or fresh air, wear a properly maintained and properly fitted NIOSH approved respirator.

For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.

A dust mask does not provide protection against vapors.

Eye Protection

Chemical splash goggles or a face shield is recommended to safeguard against potential eye contact, irritation, or injury.

Protective Gloves

Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile, natural rubber, and neoprene will provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.
Other Protective Clothing
Various application methods can dictate the use of additional protective safety equipment, such as impermeable aprons to minimize exposure.

Ventilation
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain 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 and move to fresh air.

Work/Hygienic/Maintenance Practices
Wash hands thoroughly after use and before eating, drinking, or smoking.

Do not eat, drink, or smoke in the work area.

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

9. Physical and Chemical Properties

Physical States:    [ ] Gas    [X] Liquid    [ ] Solid
Melting Point:     No data.
Boiling Point:     212.00 F - 500.00 F
Autoignition Pt:   No data.
Flash Pt:          NE
Explosive Limits:  LEL: No data.                UEL: No data.
Specific Gravity (Water = 1):  1.25
Density:          10.246 LB/GL  at  75.0 F
Bulk density:     No data.
Vapor Pressure (vs. Air or mm Hg): < 1 MM HG  at  20.0 C
Vapor Density (vs. Air = 1):    > 1
Evaporation Rate (vs Butyl Acetate=1):  < 1
Solubility in Water: Complete
Percent Volatile:  53.0 % by weight.
VOC / Volume:     5.0000 G/L
Heat Value:       No data.
Particle Size:    No data.
Corrosion Rate:   No data.
pH:              < 1
Appearance and Odor
Clear Green Liquid

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10. Stability and Reactivity

**Stability:**

Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability**

No data available.

**Incompatibility - Materials To Avoid**

Incompatible with bases, aluminum, brass, and bronze.

**Hazardous Decomposition Or Byproducts**

Thermal decomposition may produce phosphorous oxides and/or phosphine. Hydrogen gas may be formed from reaction with metals.

**Possibility of Hazardous Reactions:**  Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions**

No data available.

11. Toxicological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

**Phosphoric Acid:**

**ACUTE TOXICITY:**

LD50 Rat oral 1520 mg/kg
LD50 Rabbit skin 2740 mg/kg
LC50 (guinea pig, mouse, rat, rabbit) 61-1,689 mg/m3

Not found to be toxic to animals by oral and dermal exposure as defined by OSHA. Highly toxic to animals by inhalation as defined by OSHA.

**SKIN CORROSION / IRRITATION:** Can cause severe skin irritation.

**SERIOUS EYE DAMAGE / IRRITATION:** Can cause severe eye irritation and damage.

**RESPIRATORY OR SKIN SENSITIZATION:** Not considered a sensitizer.

**ASPIRATION HAZARD:** No data.

**MUTAGENIC DATA:** No data.

**IMMUNOTOXICITY:** No data.

**NEUROTOXICITY:** No data.

**DEVELOPMENTAL/REPRODUCTIVE:** No data.

**CARCINOGEN STATUS:** Not listed.

**Chronic Toxicological Effects**

This product has not been tested as a whole.

**Carcinogenicity/Other Information**

No data available.

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
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<tbody>
<tr>
<td>1. Phosphoric acid (Orthophosphoric acid)</td>
<td>7664-38-2</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

12. Ecological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

**Phosphoric Acid:**

**TOXICITY:**

LC50 Fish 3.0-3.5 mg/L 96 hr

Moderately toxic to aquatic organisms as defined by USEPA.

**PERSISTENCE AND DEGRADABILITY:** Phosphoric acid undergoes ionic dissociation in water. While acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or
incorporate into biological systems.

**BIOACCUMULATIVE POTENTIAL:** See above.

**MOBILITY IN SOIL:** No data.

**OTHER ADVERSE EFFECTS:** No data.

### 13. Disposal Considerations

**Waste Disposal Method**

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

### 14. Transport Information

**LAND TRANSPORT (US DOT)**

**DOT Proper Shipping Name**

Compound Cleaning Liquid

**AIR TRANSPORT (ICAO/IATA)**

**ICAO/IATA Shipping Name**

Corrosive Liquid, n.o.s. (Contains Phosphoric Acid)

**UN Number:**

UN17

**Hazard Class:**

8 - CORROSIVE

**Packing Group:**

III

**MARINE TRANSPORT (IMDG/IMO)**

**IMDG/IMO Shipping Name**

Corrosive Liquid, n.o.s. (Contains Phosphoric Acid)

**UN Number:**

1760

**Hazard Class:**

8 - CORROSIVE

**Packing Group:**

III

**Additional Transport Information**

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The shipper/supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

### 15. Regulatory Information

**US EPA SARA Title III**

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
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</thead>
<tbody>
<tr>
<td>1. Phosphoric acid (Orthophosphoric acid)</td>
<td>7664-38-2</td>
<td>No</td>
<td>Yes 5000 LB</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**US EPA CAA, CWA, TSCA**

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>EPA CAA</th>
<th>EPA CWA NPDES</th>
<th>EPA TSCA</th>
<th>CA PROP 65</th>
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</thead>
<tbody>
<tr>
<td>1. Phosphoric acid (Orthophosphoric acid)</td>
<td>7664-38-2</td>
<td>HAP, ODC ()</td>
<td>No</td>
<td>Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

**EPA Hazard Categories:**

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- [X] Yes [ ] No Acute (immediate) Health Hazard
- [ ] Yes [X] No Chronic (delayed) Health Hazard
- [ ] Yes [X] No Fire Hazard
- [ ] Yes [X] No Sudden Release of Pressure Hazard
- [ ] Yes [X] No Reactive Hazard

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16. Other Information

No data available.