1. Identification

Product Name: KRDKUT QT 6PK METAL CLEAN ETCH
Revision Date: 10/9/2015

Product Identifier: ME326
Supercedes Date: 8/17/2015

Product Use/Class: Metal Clean & Etch/ Phosphoric Acid

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL  60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL  60061
USA

Preparer: Regulatory Department
Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Signal Word
Danger

GHS HAZARD STATEMENTS
Skin Corrosion, category 1B  H314  Causes severe skin burns and eye damage.
Acute Toxicity, Inhalation, category 3  H331  Toxic if inhaled.

GHS LABEL PRECAUTIONARY STATEMENTS
P260  Do not breathe dust, fumes, gases, mists, vapors, or spray.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331  IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310  Immediately call a POISON CENTER or doctor/physician.
P311  Call a POISON CENTER or doctor/physician.
P403+P233  Store in a well-ventilated place. Keep container tightly closed.

GHS SDS PRECAUTIONARY STATEMENTS
P363  Wash contaminated clothing before reuse.

3. Composition/Information On Ingredients
4. First-aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Remove contaminated clothing. Wash skin with soap and water. Get medical attention immediately. Wash clothing separately before reuse. Destroy contaminated shoes.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

5. Fire-fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Keep containers tightly closed. No unusual fire or explosion hazards noted.

**SPECIAL FIREFIGHTING PROCEDURES:** Containers can rupture and release highly toxic material if exposed to heat. Substance is non-combustible but reacts with many metals to form explosive hydrogen gas. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Avoid runoff into sewers and waterways. Provide ventilation and approach spill from upwind using proper personal protective equipment as indicated in Section 8. Carefully neutralize spill with sodium bicarbonate (NaHCO3). Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Weight % Less Than</th>
<th>ACGIH TLV-TWA</th>
<th>ACGIH TLV-STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL-CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>35.0</td>
<td>1 mg/m3</td>
<td>3 mg/m3</td>
<td>1 mg/m3</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

**PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.
RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Use impervious gloves to prevent skin contact and absorption of this material through the skin. Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots and chemical safety goggles plus a face shield. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Relative Density, °C</td>
<td>1.200</td>
</tr>
<tr>
<td>Freeze Point, °C</td>
<td>30</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Decomposition Temp., °C</td>
<td>N.D.</td>
</tr>
<tr>
<td>Boiling Range, °C</td>
<td>100 - 158</td>
</tr>
<tr>
<td>Flammability</td>
<td>Does not support combustion</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Slower than Ether</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than Air</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N.E.</td>
</tr>
<tr>
<td>pH</td>
<td>1.0 - 3.0</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No Information</td>
</tr>
<tr>
<td>Partition Coefficient, n-octanol/water</td>
<td>N.D.</td>
</tr>
<tr>
<td>Explosive Limits, vol%</td>
<td>N.A. - N.A.</td>
</tr>
<tr>
<td>Flash Point, °C</td>
<td>94</td>
</tr>
<tr>
<td>Auto-ignition Temp., °C</td>
<td>N.D.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N.D.</td>
</tr>
</tbody>
</table>

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases. Avoid contact with metals.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies. Product slowly corrodes copper, aluminum, zinc, and galvanized surfaces.

HAZARDOUS DECOMPOSITION: Decomposition produces hydrogen chloride, chlorine and hydrogen gases.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Substance causes severe eye irritation. Injury may be permanent.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance is corrosive. Causes severe skin burns. Severely irritating; may cause permanent skin damage. Corrosive; causes skin burning.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Corrosive and may cause severe and permanent damage to mouth, throat and stomach. Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated exposure to low concentrations of HCl vapor or mist may cause bleeding of nose and gums.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

ACUTE TOXICITY VALUES
The acute effects of this product have not been tested. Data on individual components are tabulated below:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Vapor LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>7664-38-2</td>
<td>Phosphoric Acid</td>
<td>1530 mg/kg Rat</td>
<td>2740 mg/kg Rabbit</td>
<td>&gt;.9 mg/L Rat</td>
</tr>
</tbody>
</table>

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.
### 13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

### 14. Transport Information

<table>
<thead>
<tr>
<th></th>
<th>Domestic (USDOT)</th>
<th>International (IMDG)</th>
<th>Air (IATA)</th>
<th>TDG (Canada)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number:</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Proper Shipping Name:</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Limited Quantity:</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### 15. Regulatory Information

#### U.S. Federal Regulations:

**CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA ‘Hazard Categories’ promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

**Sara Section 313:**

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
</tr>
</tbody>
</table>

**Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

### 16. Other Information

#### HMIS RATINGS

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

#### NFPA RATINGS

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUNDS, g/L:**

0

**SDS REVISION DATE:**

10/9/2015

**REASON FOR REVISION:**

Product Composition Changed
Substance and/or Product Properties Changed in Section(s):
09 - Physical & Chemical Properties
11 - Toxicological Information
14 - Transport Information

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined
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