SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: TRANSENNE COMPANY, INC.
ADDRESS: DANVERS INDUSTRIAL PARK
10 ELECTRONICS AVENUE DANVERS, MA 01923
TEL: (978) 777-7860 FAX: (978)-739-5640
WWW.TRANSENNE.COM
EMERGENCY NO. 1-800-424-9300 CHEMTREC

MATERIAL NAME: ALUMINUM ETCHANT TYPE A
REVISED: December 2020
CHEMICAL FAMILY: Acid mixture
Product Number: 060-0026000

SECTION 2. HEALTH HAZARD INFORMATION

Hazard Statements

H290 Corrosive to Metals: Category 1
H303 Acute toxicity Oral : Category 5
H313 Acute toxicity Dermal: Category 5
H331 Acute toxicity Inhalation : Category 3
H314 Skin corrosion / Skin irritation : Category 1
H318 Serious eye damage / Eye irritation : Category 1
H371 Special target organ systemic toxicity single exposure: Category 2
H373 Special target organ systemic toxicity repeated exposure : Category 2

Pictograms or Hazard symbols
Signal word: Danger!

May be corrosive to metals

Harmful if swallowed or in contact with skin.

Toxic if mist is inhaled.

Causes severe skin burns and serious eye damage.

Health hazard. May cause damage to lungs, eyes, and mucous membranes through prolonged or repeated exposure.

Precautionary Statements
P234 Keep only in original container.
P260 Do not breathe dusts or mist.
P261 Avoid breathing fumes, mist, or vapors.
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
**Special fire fighting procedures:** Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes. Contact with oxidizing reagents may cause extremely violent combustion.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**SPILLS, LEAKS:** Ventilate area of leak or spill. Clean up personnel should wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite.

**SECTION 7. HANDLING AND STORAGE**

Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Do not breathe dust, mist, or vapor. Do not expose eyes, skin, or clothing. Keep container closed tightly. Avoid contact with combustibles. Do not use with metal tools or items. Use with adequate ventilation or respiratory protection. Do not store near combustibles or in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances. Separate from metals, alkali, and organics.

**SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION**

**Respiratory protection:** Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment to avoid exposure to vapors. A respiratory protection program complying with requirements of 29CFR 1910.134 is recommended.

**Ventilation:** Where adequate ventilation is not available, use NIOSH approved vapor respirator with dust, fume and mist filters. Local ventilation through fume hoods or laminar flow stations is also preferred. Keep fumes away from strong bases.

**Protective gloves:** Skin contact should be minimized through use of rubber gloves. Other protective equipment: Steel tipped shoes/eye wash station/chemical safety chemical retardant clothing.

**Eye protection:** Safety goggles / face shield

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Syrupy liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Vinegar</td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>100 °C (water)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Non-flammable.</td>
</tr>
<tr>
<td>Ignition point</td>
<td>Will not ignite.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 150 °C</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Volatiles, g/L</td>
<td>750-850</td>
</tr>
<tr>
<td>Vapor pressure at 15° C, mm Hg</td>
<td>51 mm Hg at 25 °C</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.45 g/cc</td>
</tr>
<tr>
<td>Solubility in / Miscibility</td>
<td>Completely miscible in water</td>
</tr>
<tr>
<td>Evap. Rate (Water = 1)</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

**SECTION 10. STABILITY AND REACTIVITY**
Class 8
PG II
UN3264
Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Phosphoric Acid and Nitric Acid)

SECTION 15. REGULATORY

Symbol: C, Corrosive
R-Phrase:
R: Contact with combustible material may cause fire.
R21/22: Harmful in contact with skin and if swallowed.
R35: Causes severe burns.
R41: Risk of serious damage to eyes.
S-Phrases:
S17: Keep away from combustible material.
S23-36/37/39-45 Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

The following component of this product is regulated as toxic a chemical under section 313 or Title III SARA, and 40CFR 372:

Nitric Acid CAS# 7697-37-2

SECTION 16. OTHER INFORMATION

NFPA Codes:
Health: 3
Flammability: 0
Reactivity: 1
R8: Contact with combustible material may cause fire.
R35: Causes severe burns.
All ingredients of this product are listed on the US TSCA inventory under their parent anhydrous compounds.