Material Safety Data Sheet

Gardo® TP 10606

Version 1.5
Revision Date 12/06/2007
Print Date 12/06/2007

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Gardo® TP 10606
MSDS Number : REL_10963
Company : OAKITE PRODUCTS INC
675 Central Avenue
New Providence, NJ 07974
Telephone : +18005264473
Telefax : +19084644658
Emergency telephone no : CHEMTREC - 800-424-9300

SECTION 2. HAZARDOUS COMPONENTS INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium (III) phosphate</td>
<td>7789-04-0</td>
<td>1.00 - 10.00</td>
</tr>
<tr>
<td>Chromium (III) Trifluoride</td>
<td>7788-97-8</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td>7664-39-3</td>
<td>1.00 - 5.00</td>
</tr>
</tbody>
</table>


SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview

Form : liquid
Colour : green
Odour : acrid
Hazard Summary : Harmful by inhalation and if swallowed. Causes severe burns. Liquid or vapor causes burns which may be delayed.

Route(s) of Entry

<table>
<thead>
<tr>
<th>Route(s) of Entry</th>
<th>Inhalation</th>
<th>Skin</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Carcinogenicity:

NTP : No substance in this product is listed by NTP as a carcinogen
IARC : No substance in this product is listed by IARC as a carcinogen
OSHA : No substance in this product is regulated by OSHA as a carcinogen

SECTION 4. FIRST AID MEASURES

Inhalation : If inhaled, remove to fresh air. If symptoms persist, call a
physician. If breathing is irregular or stopped, administer artificial respiration.

**Skin contact**: Wash off immediately with plenty of water for at least 15 minutes. Pay particular attention to skin under nails. Take off contaminated clothing and shoes immediately. Get medical attention immediately if irritation develops and persists.

**Eye contact**: Rinse immediately with plenty of water for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention immediately.

**Ingestion**: Rinse mouth. Give several glasses of water to drink followed by milk of magnesia. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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**SECTION 5. FIRE-FIGHTING MEASURES**

- **Flash point**: Note: does not flash.
- **Lower explosion limit**: Note: Not applicable.
- **Upper explosion limit**: Note: Not applicable.
- **TDG Flammability Class**: NONE
- **Suitable extinguishing media**: carbon dioxide (CO2), dry chemical, foam, water spray.
- **Special protective equipment for fire-fighters**: In the event of fire, wear self-contained breathing apparatus.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- **Methods for cleaning up**: Soak up with inert absorbent material. Lime, soda ash. Keep in suitable, closed containers for disposal.
- **Additional advice**: Never return spills in original containers for re-use.
SECTION 7. HANDLING AND STORAGE

Storage
Requirements for storage areas and containers: KEEP FROM FREEZING
Keep containers tightly closed to avoid contamination
Store indoors in a cool, well-ventilated place

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV (TWA)</th>
<th>OSHA PEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium (III) phosphate</td>
<td>0.5 mg/m3 as CrN.D.</td>
<td>0.5 mg/m3 as CrN.D.</td>
</tr>
<tr>
<td>Chromium (III) Trifluoride</td>
<td>0.5 mg/m3 as CrN.D.</td>
<td>0.5 mg/m3 as CrN.D.</td>
</tr>
<tr>
<td>Hydrofluoric Acid</td>
<td>2.3 mg/m3 as ceiling N.D.</td>
<td>3 ppm N.D.</td>
</tr>
</tbody>
</table>

Eye protection: Chemical resistant goggles must be worn.
Hand protection: Wear neoprene gloves to prevent contact with hydrofluoric acid.
Skin and body protection: Complete suit protecting against chemicals.
Respiratory protection: If the occupational exposure limits cannot be met, suitable respiratory equipment should be worn.
Hygiene measures: Avoid contact with skin, eyes and clothing
Wear suitable gloves and eye/face protection
Wear suitable protective clothing
Wash hands before breaks and immediately after handling the product
Provide adequate ventilation
Do not inhale fumes.
Keep away from food and drink

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

pH: < 2.5
Melting point/range: 0 °C (0 °C)
Boiling point/range: Note: no data available

N.D. - Not Determined
N.A. - Not Applicable
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Vapour pressure: Note: no data available
Bulk density: 9.25 lb/gal
Water solubility: Note: completely soluble
Partition coefficient (n-octanol/water): Note: no data available
Percent of Volatile by Weight excluding water: Note: no data available
Relative density: 1.111
Evaporation rate: 1
Note: Water = 1

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid: freezing
Materials to avoid: bases
Warning! Do not use together with other products; may release dangerous gases (chlorine).
Avoid prolonged contact of concentrate with glass, ceramic, or concrete.
Hazardous decomposition products: Acidic fumes
 chromium oxides
 hydrogen, by reaction with metals
 Gaseous hydrogen fluoride (HF).

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity: Mixture; Not Determined.
Acute toxicity (other route)
Hydrofluoric Acid: LD50, rat, Intraperitoneal
Dose: 25 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Not Available

N.D. - Not Determined
N.A. - Not Applicable
SECTION 13. DISPOSAL CONSIDERATIONS

Advice on Disposal : Refer to all federal, provincial, state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION

Refer to Bill of Lading.

SECTION 15. REGULATORY INFORMATION

TSCA Status : All components of this material comply with US TSCA requirements.

SARA 313 Components : Chromium (III) phosphate CAS-No. 7789-04-0
                          : Chromium (III) Trifluoride CAS-No. 7788-97-8
                          : Hydrofluoric Acid CAS-No. 7664-39-3
                          : N.D.

SARA 313 Components

CERCLA Reportable Quantity : Chromium (III) phosphate 10 Pounds
                             : Chromium (III) Trifluoride 10 Pounds
                             : Hydrofluoric Acid 100 Pounds

California Prop. 65 : N.D

NFPA : 3 0 0 Corrosive Acid

HMIS : 3 0 0 J

WHMIS : E: Corrosive Material

SECTION 16. OTHER INFORMATION

Further information

Oakite Products, Inc. warrants that the products described herein will conform with its published specifications. The products supplied by Oakite and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Oakite
materials for their own particular purpose. Since buyer's conditions of use of products are beyond Oakite's control, Oakite does not warrant any recommendations and information for the use of such products. OAKITE DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.