

Gardo[®] TP 10724/1

 Version 1.3
 Revision Date 12/07/2007

Print Date 12/07/2007

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Gardo[®] TP 10724/1
 MSDS Number : REL_11223

 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

Component	CAS-No.	Weight %
Chromium (III) phosphate	7789-04-0	1.00 - 10.00
Chromium (III) nitrate	13548-38-4	1.00 - 5.00
Chromium (III) oxide	1308-38-9	0.10 - 1.00
Manganese gluconate	6485-39-8	1.00 - 10.00
Manganese (II) citrate	10024-66-5	1.00 - 5.00

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

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	Inhalation	Skin	Ingestion
	yes	yes	yes

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

Gardo[®] TP 10724/1Version 1.3
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SECTION 4. FIRST AID MEASURES

- Inhalation : 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 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 Drink 1 or 2 glasses of water Never give anything by mouth to an unconscious person Get medical attention immediately

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.

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.

Gardo[®] TP 10724/1Version 1.3
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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

Component	ACGIH TLV (TWA)	OSHA PEL (TWA)
Chromium (III) phosphate	0.5 mg/m ³ as CrN.D.	0.5 mg/m ³ as CrN.D.
Chromium (III) nitrate	0.5 mg/m ³ as CrN.D.	0.5 mg/m ³ as CrN.D.
Chromium (III) oxide	0.5 mg/m ³ as CrN.D.	0.5 mg/m ³ as CrN.D.
Manganese gluconate	0.2 mg/m ³ as MnN.D.	5 mg/m ³ ceilingN.D.
Manganese (II) citrate	0.2 mg/m ³ as MnN.D.	5 mg/m ³ ceilingN.D.

Eye protection : Chemical resistant goggles must be worn.

Hand protection : impervious butyl rubber gloves

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)

Gardo[®] TP 10724/1Version 1.3
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Boiling point/range	:	Note: no data available
Vapour pressure	:	Note: no data available
Bulk density	:	9.69 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	:	1.161
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).
Hazardous decomposition products	:	Acidic fumes chromium oxides hydrogen, by reaction with metals Nitrogen Oxides Phosphorus Oxides carbon dioxide (CO ₂) carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity: : Mixture; Not Determined.

Acute oral toxicity
Chromium (III) nitrate : LD50, rat
Dose: 3,250 mg/kg

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SECTION 12. ECOLOGICAL INFORMATION

Not Available

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) nitrate CAS-No. 13548-38-4
 : Chromium (III) oxide CAS-No. 1308-38-9
 : Manganese gluconate CAS-No. 6485-39-8
 : Manganese (II) citrate CAS-No. 10024-66-5

SARA 313 Components : N.D.

CERCLA Reportable Quantity : Chromium (III) phosphate 10 Pounds
 : Chromium (III) nitrate 10 Pounds
 : Chromium (III) oxide 10 Pounds

California Prop. 65 : N.D

NFPA : 3 0 0 Corrosive Acid

HMIS : 3 0 0 J

WHMIS : D2A: Very Toxic Material Causing Other Toxic Effects
 E: Corrosive Material

Gardo[®] TP 10724/1

Version 1.3
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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.