

HTA Enterprises

Microchrome Technology Products

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

MSDS Name: CEP-200 – Chromium Etchant

Company Identification:

HTA Enterprises

Microchrome Technology Products

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www.microchrometechnology.com

For information in the US, call CHEMTREC at 703-741-5500

For emergencies in the U.S., call CHEMTREC at 1-800-424-9300

Section 2 – Composition, Information on Ingredients

- A. CAS # 7601-90-3 – Perchloric Acid – 6%
- B. CAS # 16774-21-3 – Ceric Ammonium Nitrate – 9%
- C. Other Non-Hazardous Raw Materials

Section 3 – Physical / Chemical Characteristics & Hazards Identification

Boiling Point: Undetermined

Vapor Pressure (mm Hg.): @20 degrees Celsius – 23 hPa

Vapor Density (AIR=1): @20 degrees Celsius – 1.1g/cm

Solubility in Water: Fully Soluble

Appearance & Odor: Orange liquid with a faint acid odor.

pH: Not available

Evaporation rate: Not available

Viscosity: Not available

Section 4 – Health Hazard Data and First Aid Measures

EMERGENCY OVERVIEW

Caution! The toxicological properties of this product have not been fully investigated. May cause eye, skin, gastrointestinal and respiratory tract irritation.

Potential Health Effects & First Aid Measures

- A. Eye – May cause eye irritation. If contact w/ eye occurs, flush affected eye with running water for 10-15 minutes. If irritation persists, consult a physician immediately.
- B. Skin – May cause significant skin irritation (blotching, redness). If contact occurs on skin, remove any contaminated clothing first, flush affected body part/area with plenty of water. If skin begins to burn, seek emergency medical attention immediately. Wash clothing before reuse.
- C. Ingestion – May cause severe digestive tract disturbances. Call emergency medical services or consult a doctor immediately. If victim is conscious and alert, drink large amounts of water to dilute chemical effects. Never give anything by mouth to an unconscious person.
- D. Inhalation – May cause respiratory tract irritation. If dizziness, blurred vision or faint feeling occurs, supply fresh air. If a problem persists, consult a doctor immediately. If victim not breathing, initiate CPR.
- E. Chronic – No information found.

Section 5 – Fire Fighting Measures and Explosion Hazard Data

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol resistant foam.

Flash Point: not applicable, chemical is non-flammable.

NFPA Rating: Health: 1; Flammability: 0; Instability: 0 (estimated)

Section 6 – Accidental Release Measure – Spills & Leaks

General Information: Use proper personal protective equipment as outlined in section 8.

Spills / Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), and then place in suitable container. Wear goggles, rubber boots, gloves and an acid-protecting smock. Contain a spill by diking/absorbing the spill. Do not allow spill to enter sewage system, ground and city water. Clean up spill immediately. Observe all PPE precautions and provide adequate ventilation to spill area

Section 7 - Handling and Storage

Handling: Wash hands thoroughly after handling. Remove any contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Always keep containers tightly closed. Avoid ingestion and inhalation.

Storage: Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from any incompatible substances.

Section 8 – Exposure Controls & Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Personal Protective Equipment (PPE):

- A. **Eyes** – Wear appropriate eyeglasses or chemical safety goggles. Tightly sealed around face.
- B. **Skin** – Wear appropriate gloves to prevent skin exposure. Acid resistant.
- C. **Clothing** – Wear appropriate clothing to prevent skin exposure. Acid resistant.
- D. **Respirators** – Always use a NIOSH approved respirator when necessary.

Section 9 - Reactivity and Stability Data

Chemical Stability: Stable under normal temperatures and pressures.

Reactivity & Conditions to Avoid: Excess heat, Avoid boiling of product! Do not mix with strong bases, strong alkaline materials or flammable solvents.

Section 10 – Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Section 11 – Additional Information and Disclaimer

MSDS Creation Date: 10-01-2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Microchrome Technology, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Microchrome Technology, Inc. has been advised of the possibility of such damages.